

REMARKS

A. Request for Reconsideration

Applicant has carefully considered the matters raised by the Examiner in the outstanding Office Action but remains of the position that patentable subject matter is present. Applicant respectfully requests reconsideration of the Examiner's position based on the amendments to the specification, the amendments to the claims and the following remarks.

B. The Invention

The present invention is directed to an instrument that measures masses which hang from cables. In one of the novel aspects of the invention, the instrument is composed of a central body having a stop at each end of the central body, a pressure element centrally positioned between the two stops, and washers on screws which separate the pressure element from a support. The two stops space the cables away from the central body while the washers create a separation distance between the pressure element and the central body so that any size or number of cables can pass between the pressure element and the central body. Tightening of the screws causes the pressure element to press the cables against the central body and bend away from the

central body at the two stops when the instrument is used to measure a mass.

The instrument of the present invention is illustrated in Figure 6 of the application. Figure 6 shows central body 1 having stops 2 at each end, pressure element 6 centrally located between stops 2, and washers 8 on screws 6. Stops 2 space cables 9 away from central body 1. Washers 8 create a separation distance between pressure element 6 and central body 1 so that cables 9 pass between pressure element 6 and central body 1. Tightening screws 7 cause pressure element 6 to press cables 9 against central body 1 and first and second stops 2 to push cables 9 away from central body 2 when the instrument is used to measure a mass.

The instrument of the present invention is versatile since it is capable of measuring the mass hanging from one or more cables. The instrument has this versatility because pressure element 6 is a cylinder having a smooth surface without any defined points. Thus, the instrument can measure the mass hanging from multiple cables since each cable makes contact with the cylinder along any portion of its smooth surface (page 2, par.4).

The instrument is also versatile since it can measure the mass hanging from cables having small diameters or from cables having large diameters. The instrument has this versatility because the separating distance between pressure element 6 and central body 1 can be increased or decreased by replacing the size of the washers corresponding to an increase or decrease in the diameter of the cables (page 3, par. 1).

C. Claim Objections and Amendments

Claim 1 has been canceled and Claims 2-4 are presented for further prosecution.

Claim 4 mirrors Claim 1 and presents Claim 1 in U.S. format. Claim 4 recites that stops 2 are at each end of central body 1, that stops 2 space cables 9 away from central body 1, that pressure element 6 is centrally located between stops 2, that cylindrical washers 8 are replaceable (i.e. substitutable, see page 6, line 11), that the separating distance is established between pressure element 6 and central body 1 and that screws 7 are tightened to cause pressure element 6 to press cables 9 against central body (1) and stops 2 to push away cable 9 from central body (1). Support for these amendments can be found in Figures 5 and 6 of the application. Support can also be found on page 2, pars. 4-5, page 4, pars 4-5 and page 5, par. 5 to page 6, par. 1.

Claims 2 and 3 had been objected to for not using arabic numerals to refer to the previous claim. Claims 2 and 3 have been amended to be dependent on "claim 1".

D. Specification Amendments

Page 1 of the Application has been amended to correct a minor typographic error.

E. The Office Action

Claims 1 and 2 had been rejected as being unpatentable over Beus (US 5,728,953). Claim 3 had been rejected as being unpatentable over Beus in view of Kell (US 2003/0097885).

Beus had been cited to teach an instrument that measures masses which hang from cables. The Examiner had taken the position that clamps 23 and 24 in Figure 1 of Beus are the claimed pressure element and that beam 12 and block 26 are the claimed support fastened to the pressure element. The Examiner had stated that it would be obvious to replace bars 14 of Beus with the claimed washers to accommodate different sized cables. Kell had been cited to teach electronic components for measuring tension. It will be recognized that the arrangement of Beus is opposite the arrangement of the present Invention and that Claim 4 clearly defines over Beus. Such will be discussed in more detail below.

1. Beus does not teach or suggest two stops at each end of the central body to push the cable away from a central body, and a pressure element centrally located between the two steps that press the cable against the central body.

Applicant has presented Claim 4 to clarify that the instrument is composed of two stop 2 at each end of central body 1 which space the cables away from the central body, and pressure element 6 centrally located between the stops 2 which draws the cable towards the central body 1. Claim 4 also recites that washers 8 on the screws 7 establish a separating distance between pressure element 6 and central body 1 so that cables 9 pass between pressure element 6 and central body 1. In addition, Claim 4 recites that screws 7 are tightened to centrally press cables 9 against central body 1 and push cable 9 away from central body 1 at stop 2.

As shown in Figure 6, cables 9 bend in an "S" manner against pressure element 6 and against stops 2 when screws 7 are tightened. The instrument of the present Invention is versatile since it is capable of measuring the mass hanging from one or from multiple cables. The instrument has this versatility because pressure element 6 between stops 2 is a cylinder having a smooth surface without any defined points. Thus, the instrument can measure the mass hanging from multiple cables

since each cable makes contact with the cylinder along any portion of its smooth surface (page 2, par.4). The instrument of Beus is composed of U-clamps 23 and 24, beam 12 and spacer block 26 (Figure 1). As shown in Figure 1, tensioning of cable 36 generates a normal force against spacer block 26 which, in turn, acts on beam 12. The force against beam 12 is measured to determine the mass (col. 5, lines 4-17).

Beus does not teach or suggest Claim 4. Claim 4 recites pressure element 6 pulls cable 9 against central body 1 at a central location and stops 2 at each end of central body 1 push cable 9 away from central body 1. In contrast to Claim 4, Figure 1 of Beus teaches that cable 36 passes outside spacer block 26 in relation to beam 12 (spacer block 26 being between U-clamps 23,24). Beus therefore does not teach or suggest pressure element 6 between stops 2 and that pressure element 6 pulls cable 9 against central body 1 at a central location.

In addition, Claim 4 recites that pressure element 6 has a smooth surface. In contrast, Beus teaches that spacer block 26 has curved surface 38 that mates with cable 36 (col. 4, lines 49-50). Also, since U-clamps 23,24 of Beus do not space cable 36 away from beam 12, cable 36 does not bend against U-clamps 23,24 when a mass is on cable 36. Beus therefore does not teach or suggest the claimed pressure element, or the claimed stops.

Applicant respectfully submits that Beus does not teach or suggest the claimed instrument which is versatile because one cable or multiple cables pass between the pressure element and the central body.

2. Beus does not teach or suggest replaceable washers which establish a separating distance between a pressure element and a central body.

Claim 4 recites that replaceable washers 8 establish a separating distance between pressure element 6 and central body 1 (Figure 1). Applicant explains that the claimed instrument accommodates different diameter cables since the washers are substituted depending on the diameter of the cables (page 3, par. 1 and page 6, par. 1).

The instrument of Beus only measures the mass hanging from a cable having one diameter. As shown in Figure 2, Beus teaches that spacer block 26 has a curved surface 38 which mates with cable 36 (col. 4, lines 49-50). Beus does not suggest that spacer block 26 accommodates different diameter cables. Applicant therefore submits that Beus does not suggest the replaceable washers of Claim 4.

In addition, Claim 4 recites that replaceable washers 8 establish a separating distance between pressure element 6 and central body 1 through which cables 9 pass (Figure 1). The

Examiner had taken the position that bars 14 of Beus create the separating distance of the invention. However, bars 14 of Beus do not create a separating distance through which cables 26 pass. Instead, cables 36 of Beus pass outside beam 12 and spacer block 26, no matter how many bars 14 are employed.

Applicant respectfully submits that Beus does not teach or suggest the claimed replaceable washers which establish a separating distance between the pressure element and the central body.

E. Conclusion

The 3-month period for reply to the Office Action expires on January 7, 2006. Since January 7, 2006 was a Saturday, the three-month period for reply is extended until Monday, January 9, 2006. This Response is therefore being filed within the 3-month period.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance and such action is respectfully requested. Should any extensions of time or fees be necessary in order to maintain this Application in pending

condition, appropriate requests are hereby made and  
authorization is given to debit Account # 02-2275.

Respectfully submitted,

LUCAS & MERCANTI, LLP

By: Donald C. Lucas

Donald C. Lucas, 31,275  
Attorney for Applicant(s)  
475 Park Avenue South, 15<sup>th</sup> Floor  
New York, NY 10016  
Tel. # 212-661-8000

Encl: Return receipt postcard

DCL/mr